

ABSTRACT

A method for processing divergent samples in a programmable graphics processing unit is described. In one embodiment, the method includes the step of incrementing a subroutine depth of a first sample to designate that first call instructions are to be executed on the first sample. The method also includes the steps of pushing state data of a second sample upon which the first call instructions are not to be executed onto a global stack and executing the first call instructions on the first sample.